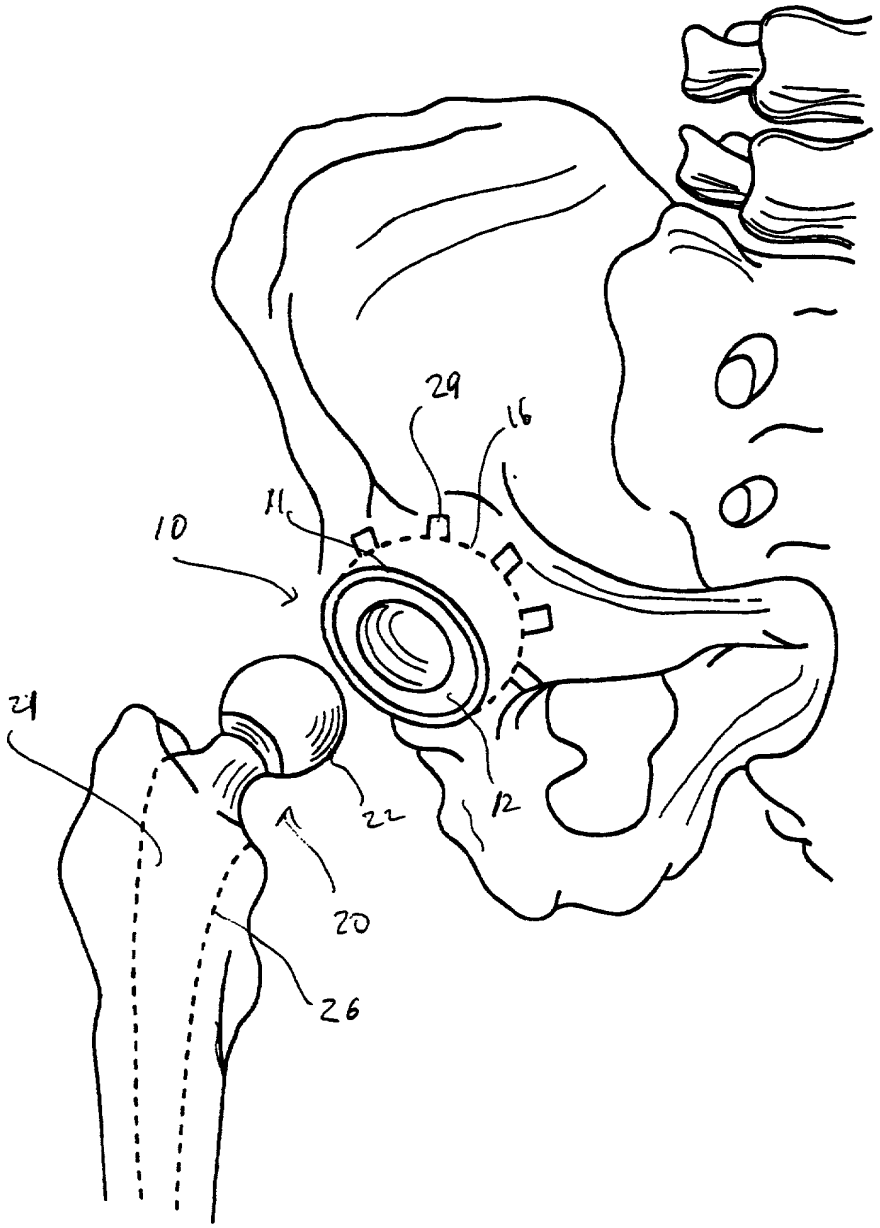


FIG. 1

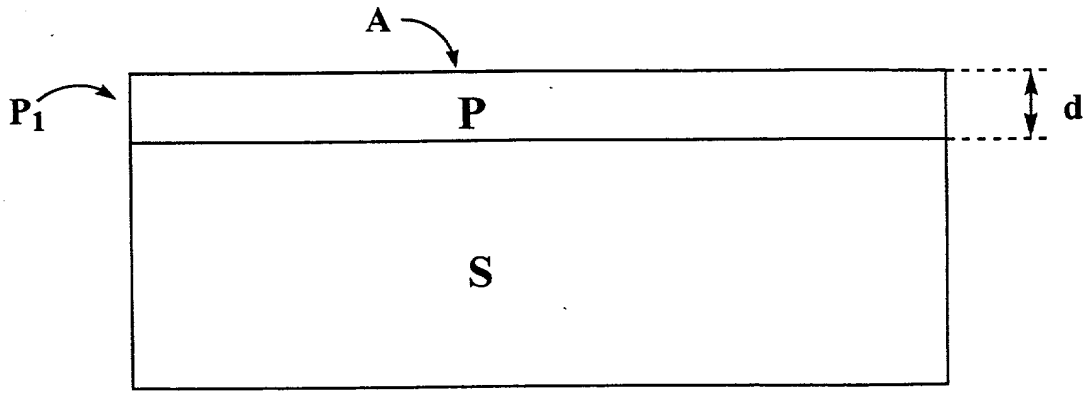


FIG. 2

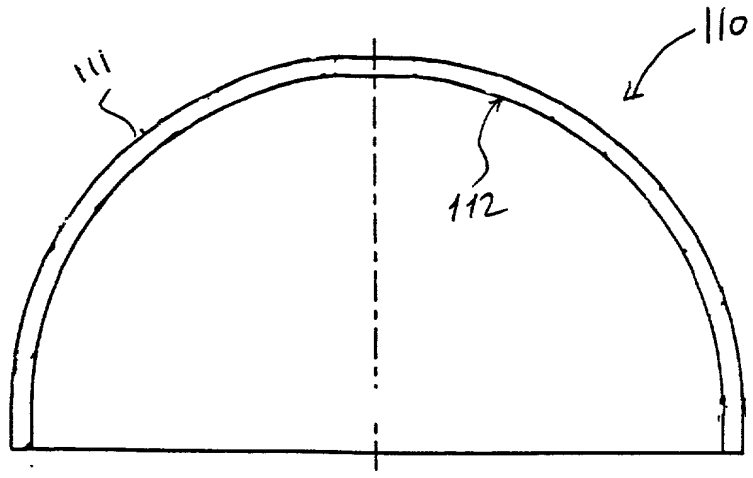


FIG. 4A

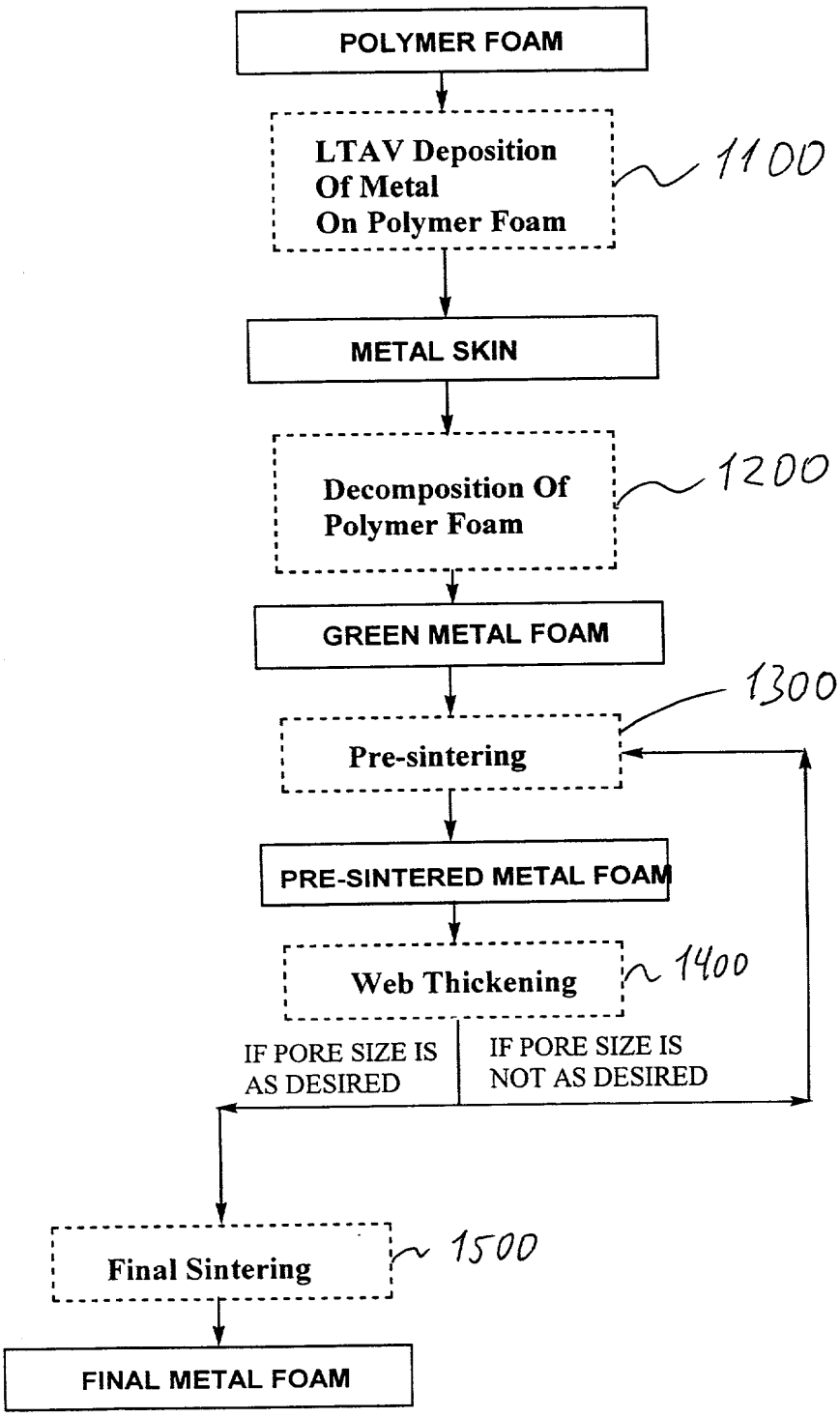

POLYMER FOAM
LTAV Deposition Of Metal On Polymer Foam
1100
METAL SKIN
Decomposition Of Polymer Foam
1200
GREEN METAL FOAM
1300
Pre-sintering
PRE-SINTERED METAL FOAM
Web Thickening
1400
IF PORE SIZE IS AS DESIRED
IF PORE SIZE IS NOT AS DESIRED
Final Sintering
1500
FINAL METAL FOAM

FIG. 3

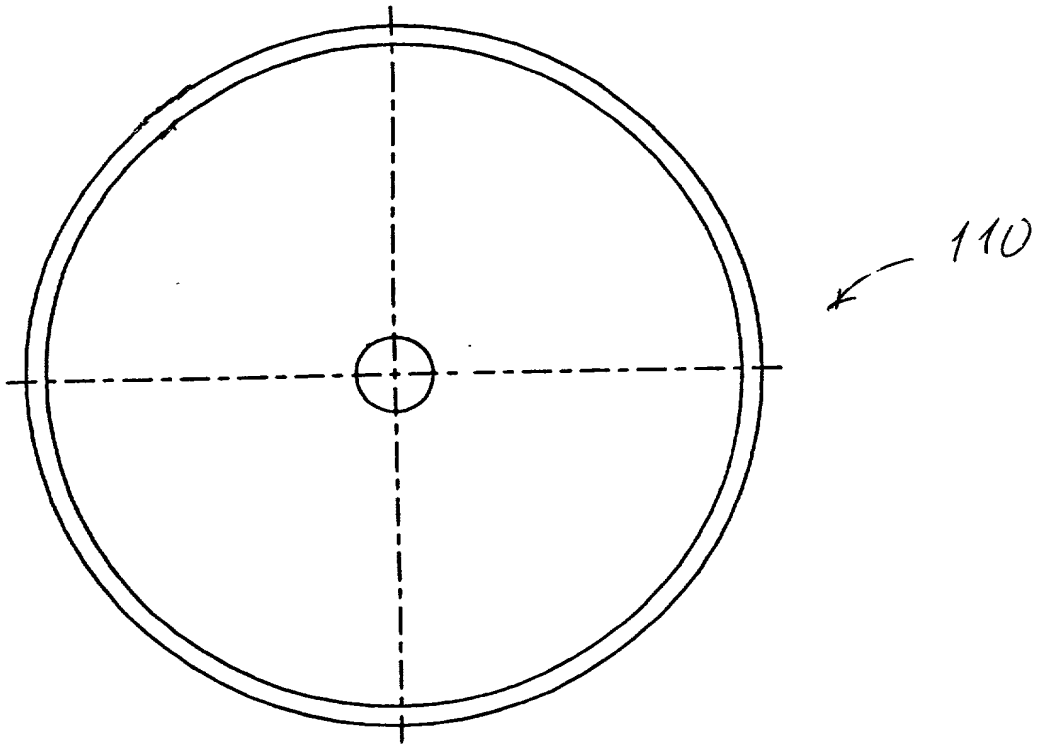


FIG. 4B

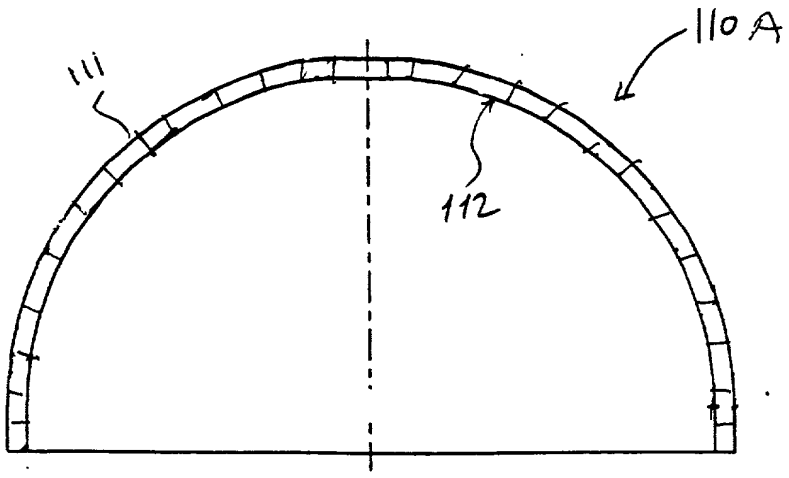
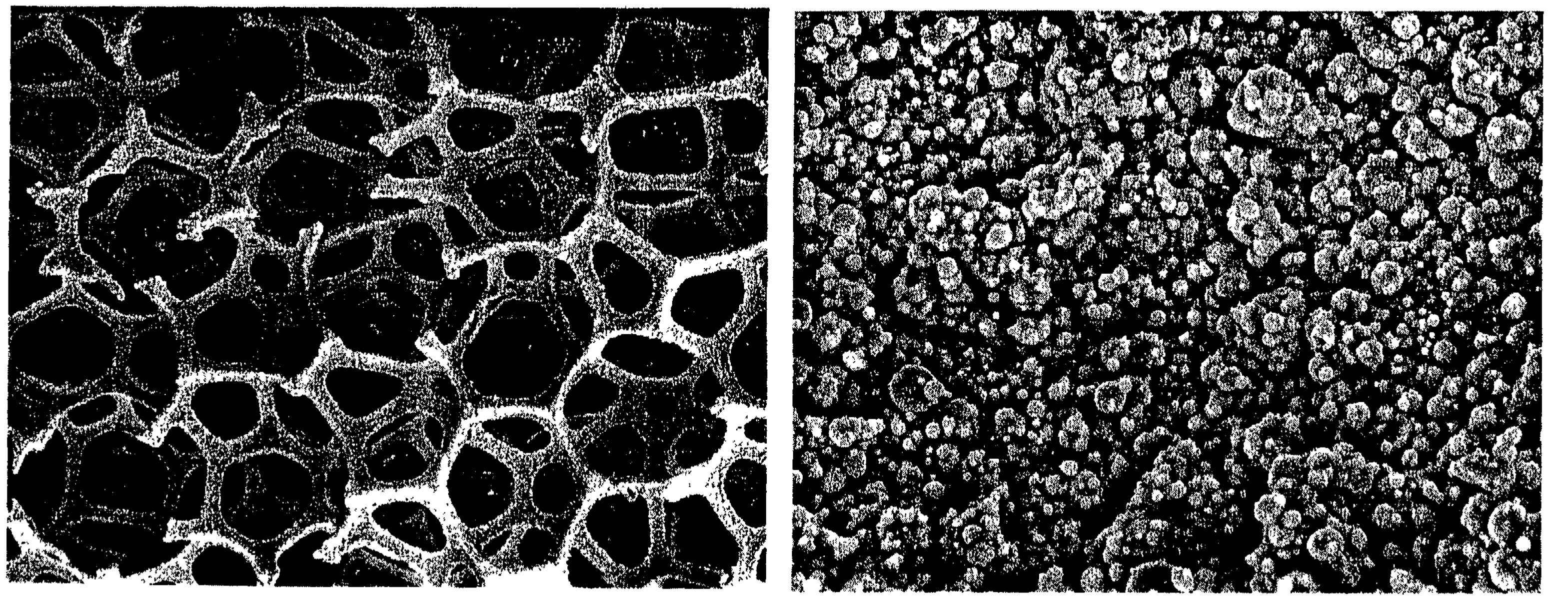


FIG. 4C



25 X   1000 X

FIG. 5

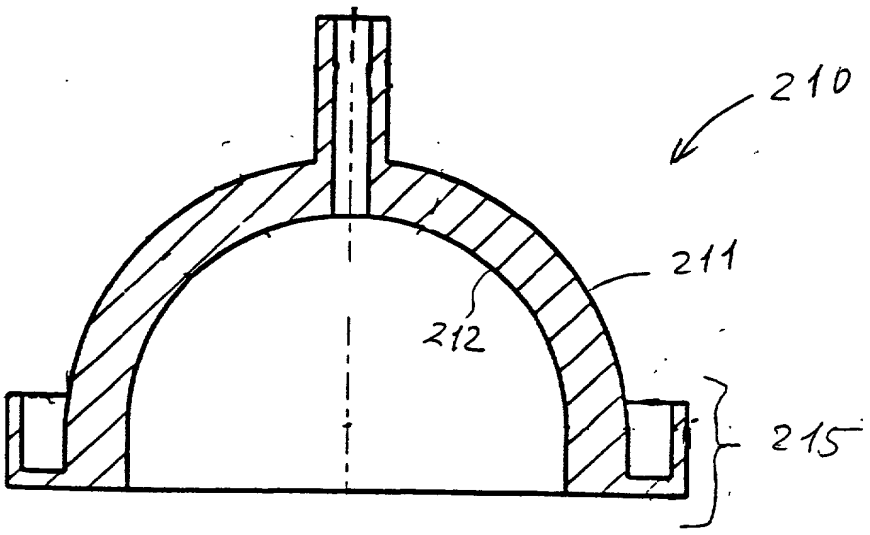


FIG. 6

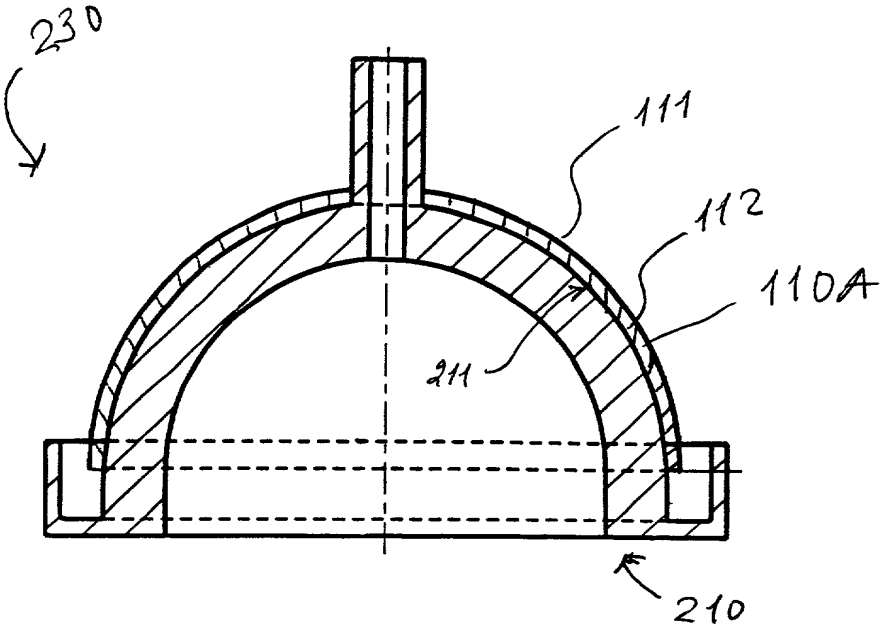


FIG. 7

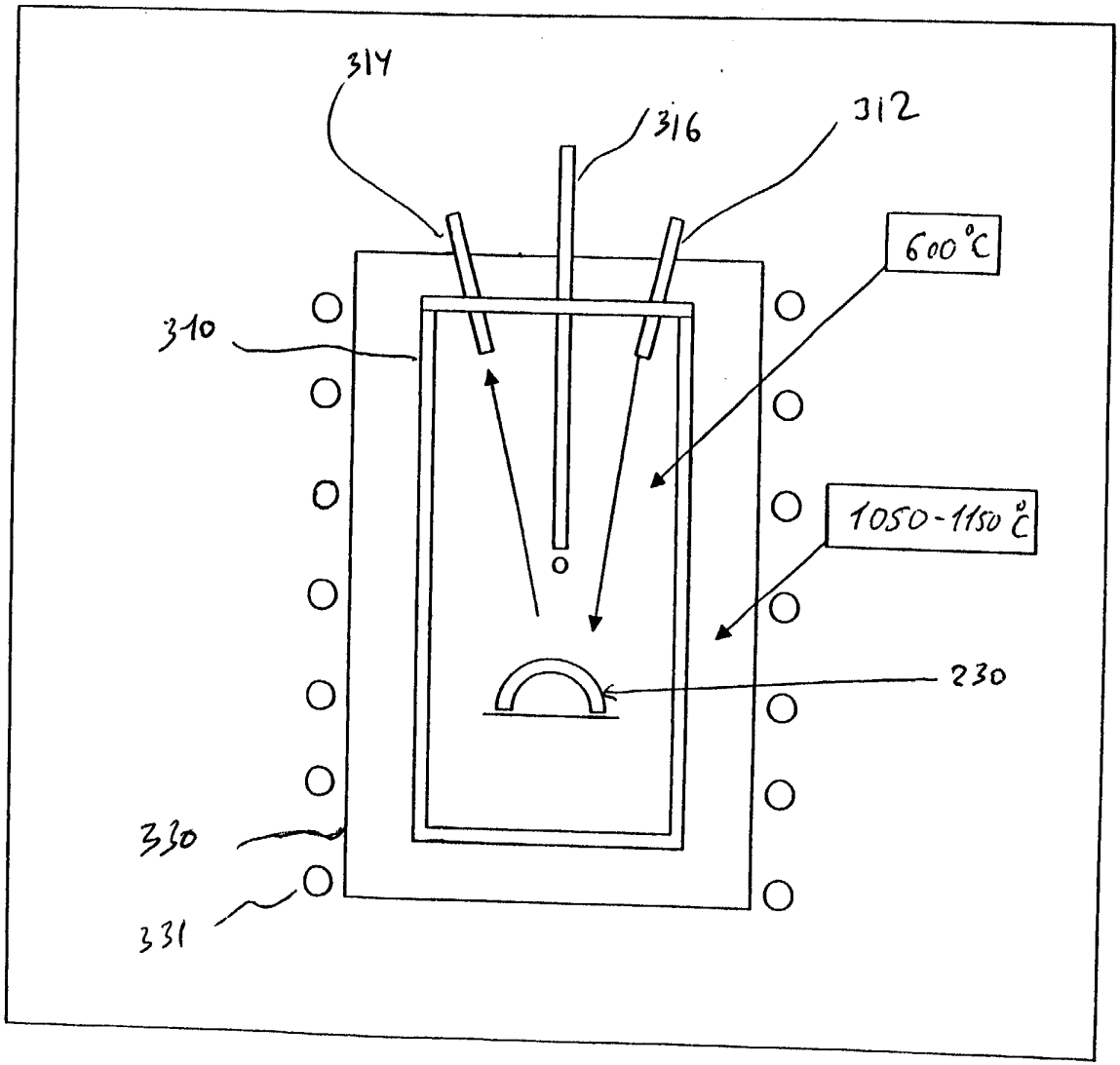


FIG. 8

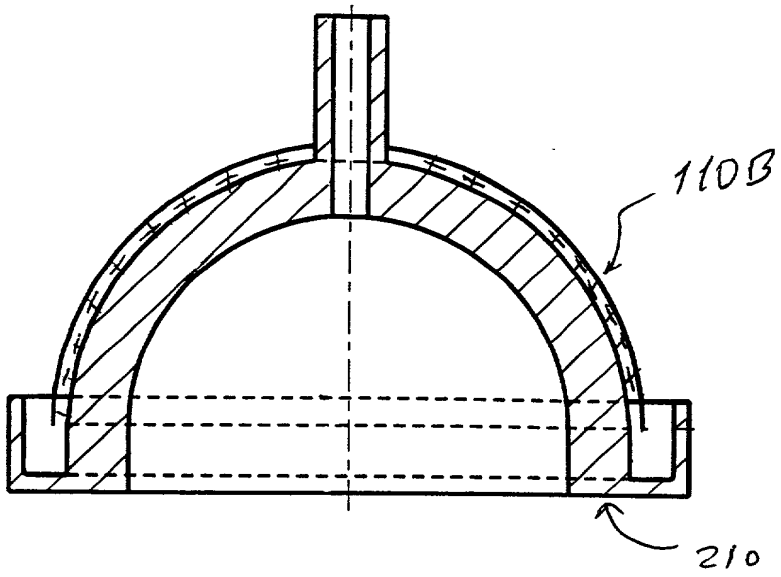
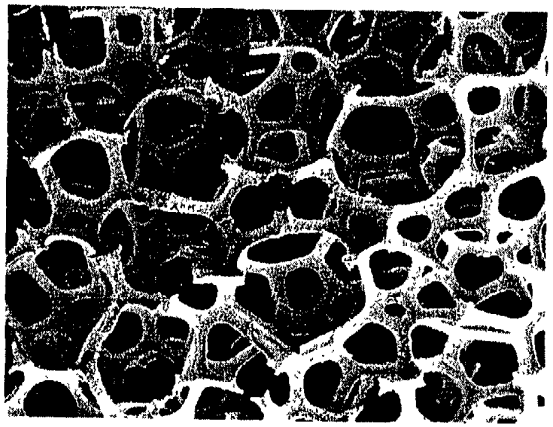
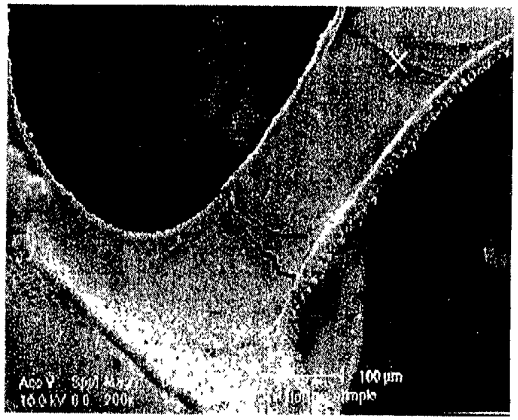


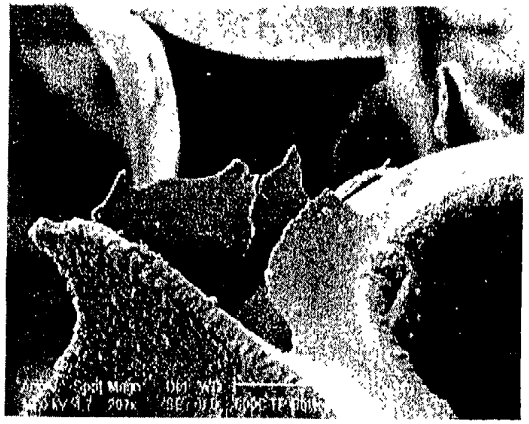
FIG. 9



25 X

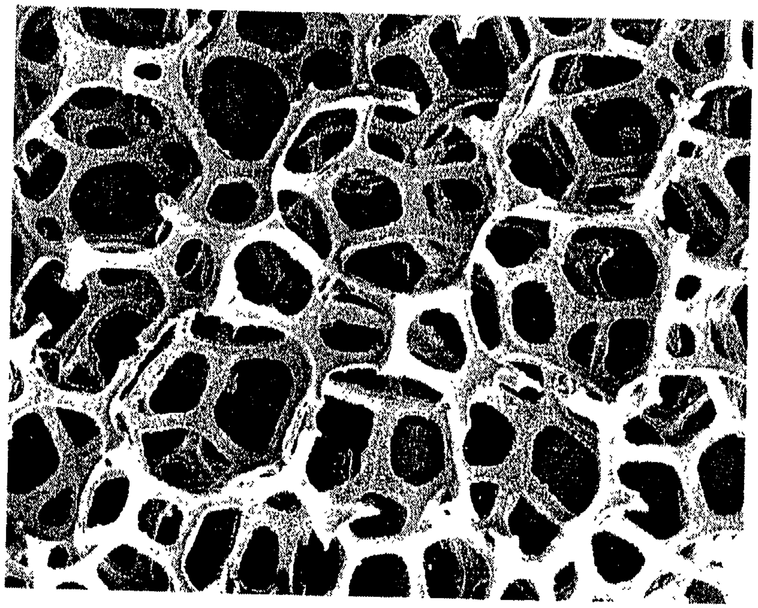


200 X

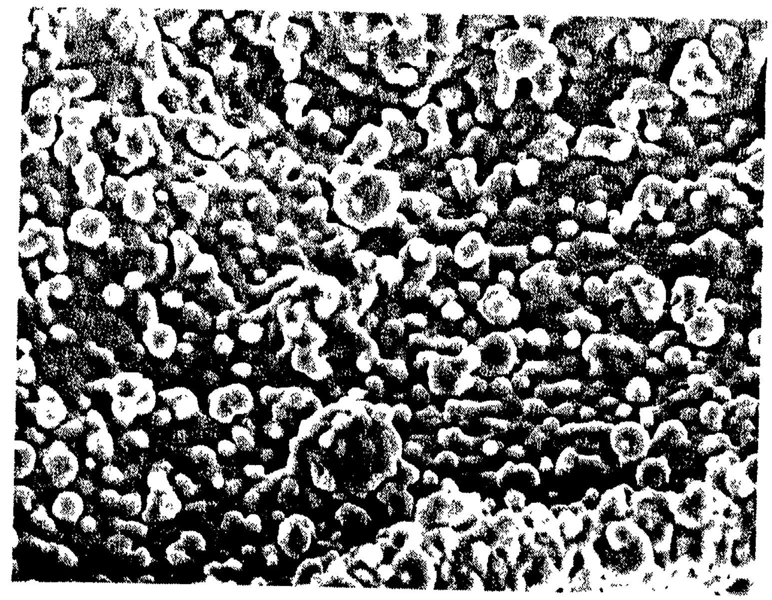


200 X

FIG. 10A



25 X



1000 X

FIG. 10B

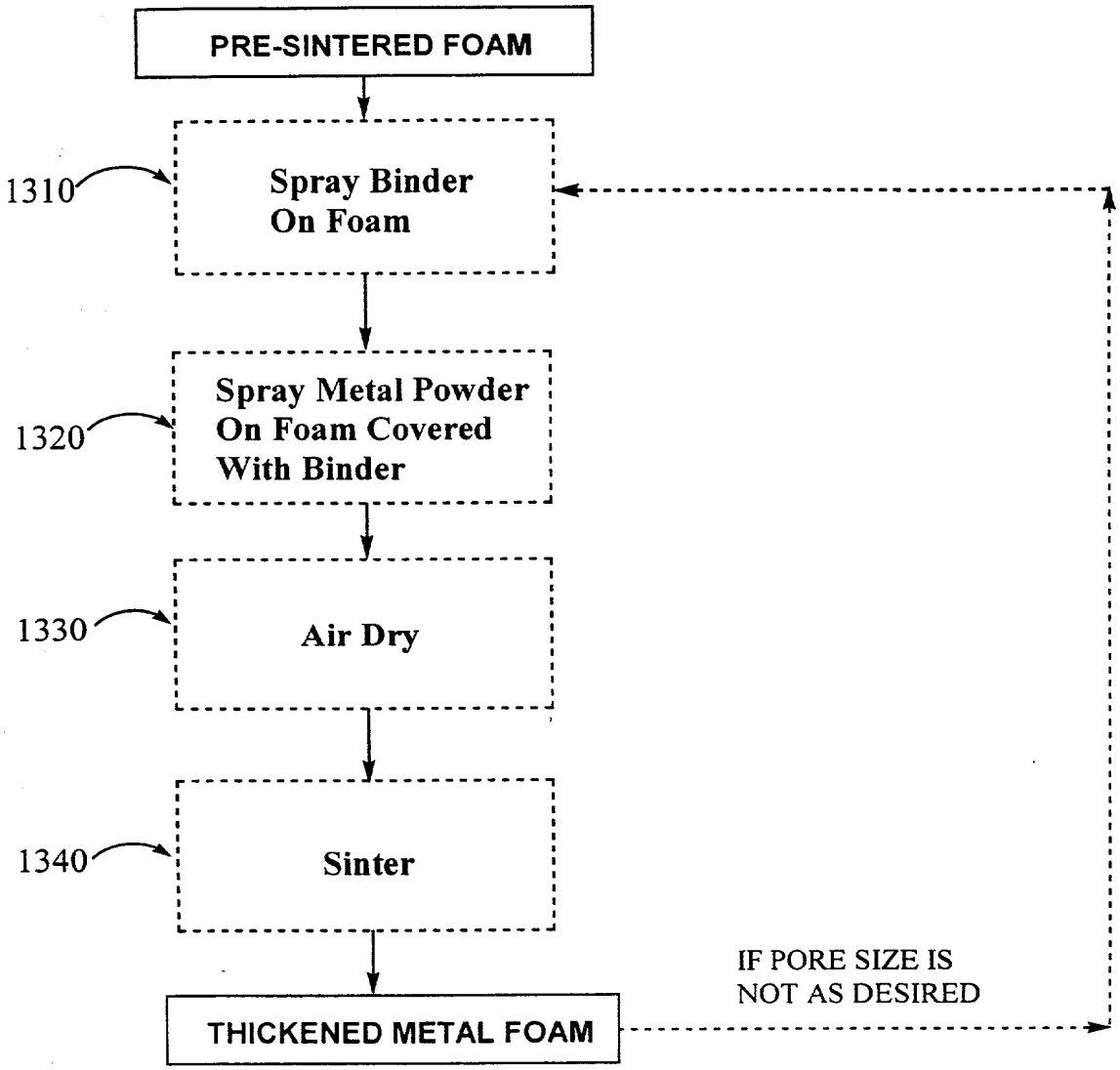

PRE-SINTERED FOAM
1310
Spray Binder On Foam
1320
Spray Metal Powder On Foam Covered With Binder
1330
Air Dry
1340
Sinter
THICKENED METAL FOAM
IF PORE SIZE IS NOT AS DESIRED

FIG. 11

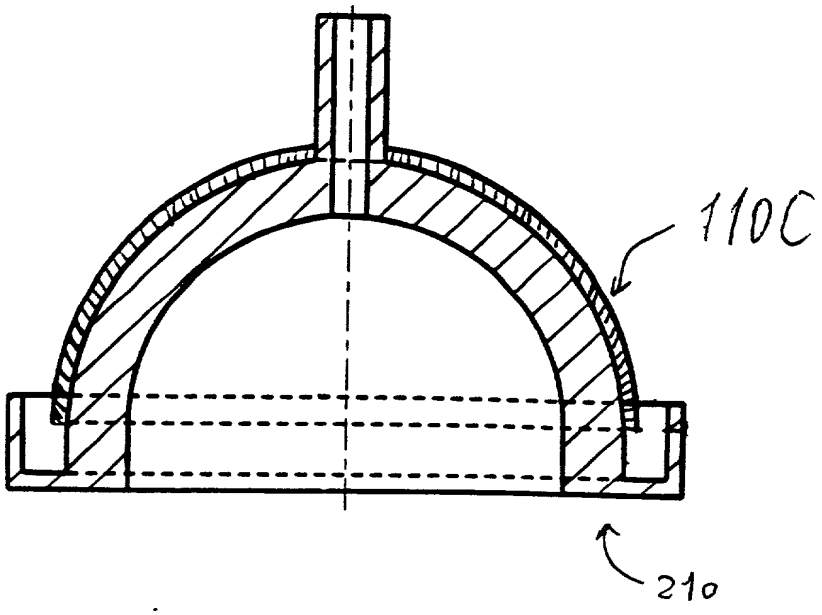


FIG. 12

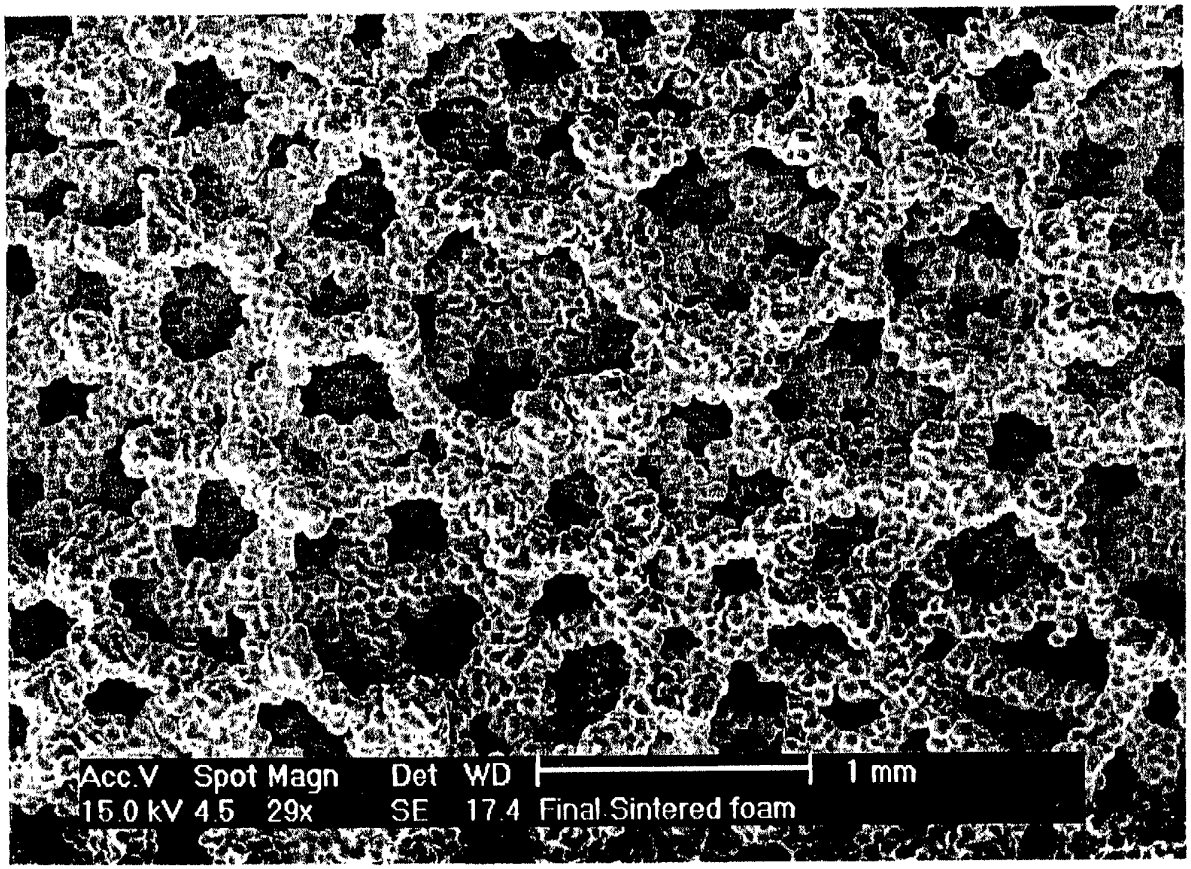

Acc.V Spot Magn Det WD 1 mm
15.0 kV 4.5 29x SE 17.4 Final Sintered foam

FIG. 13

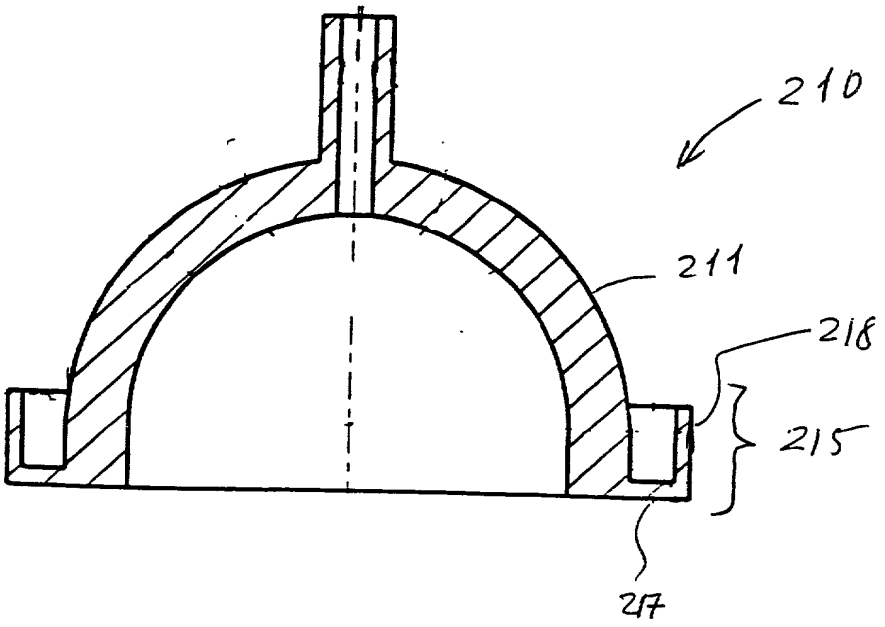


FIG. 14A

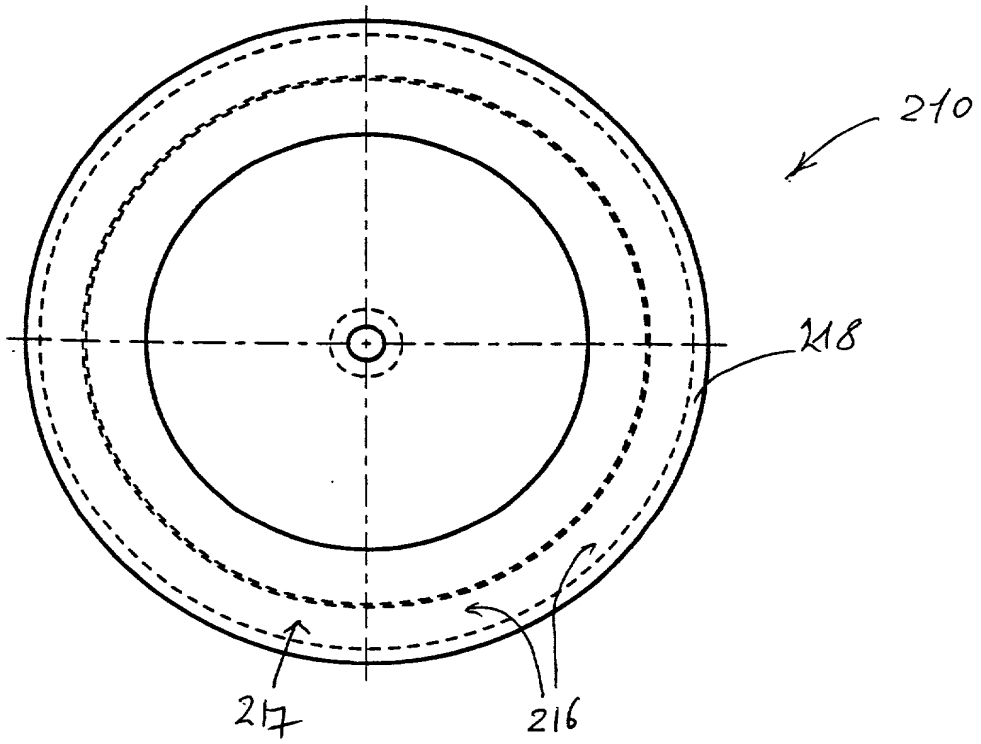


FIG. 14B

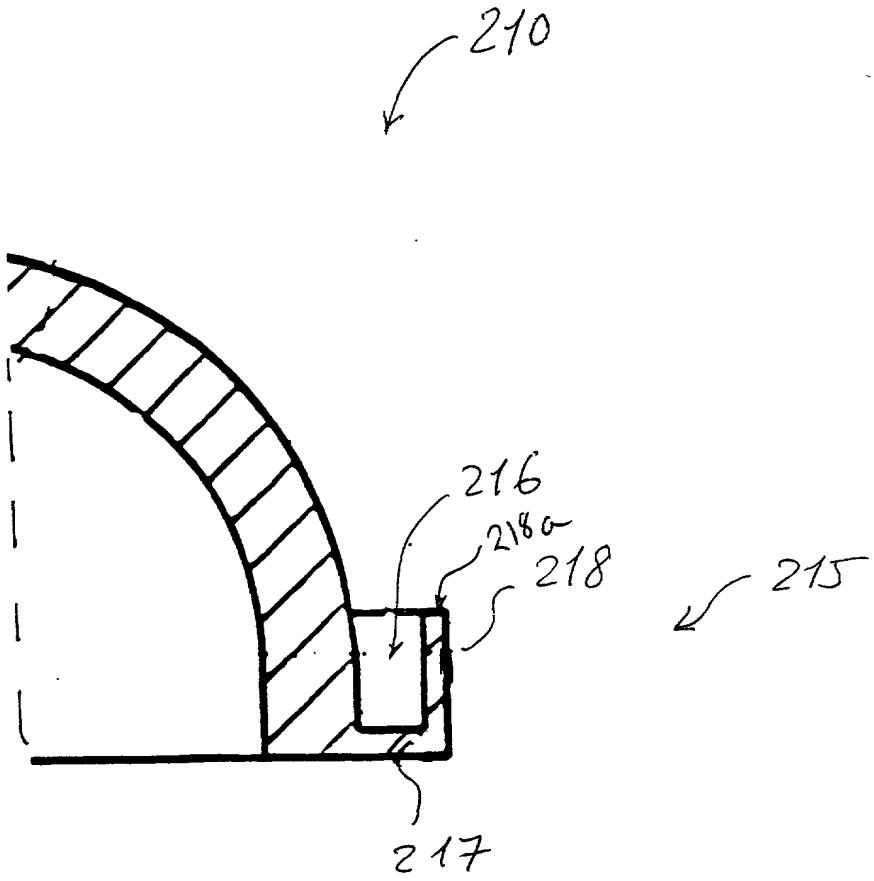


FIG. 14C

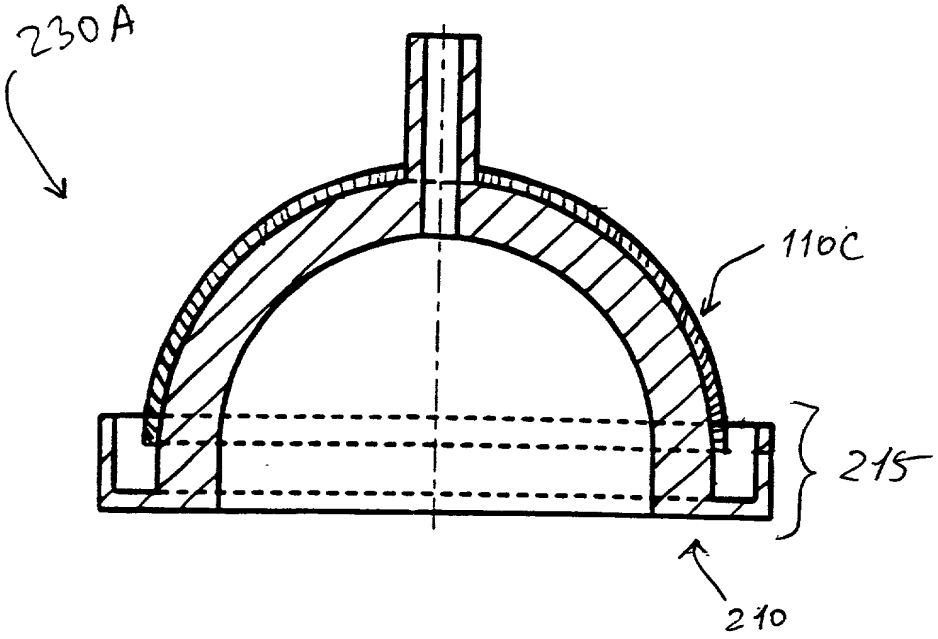


FIG. 15A

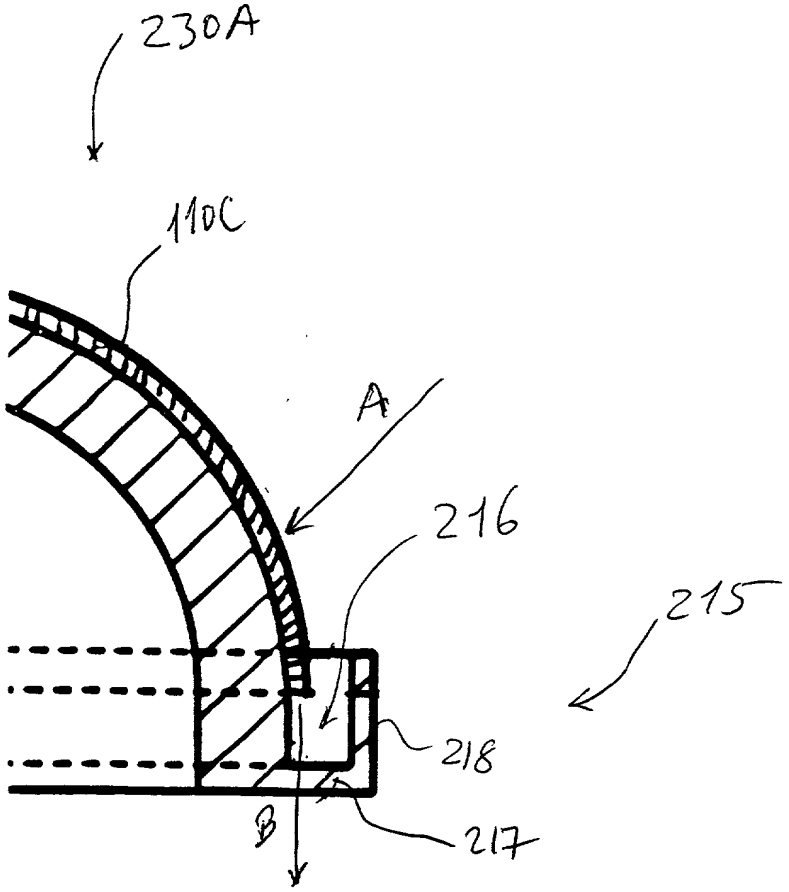


FIG. 15B

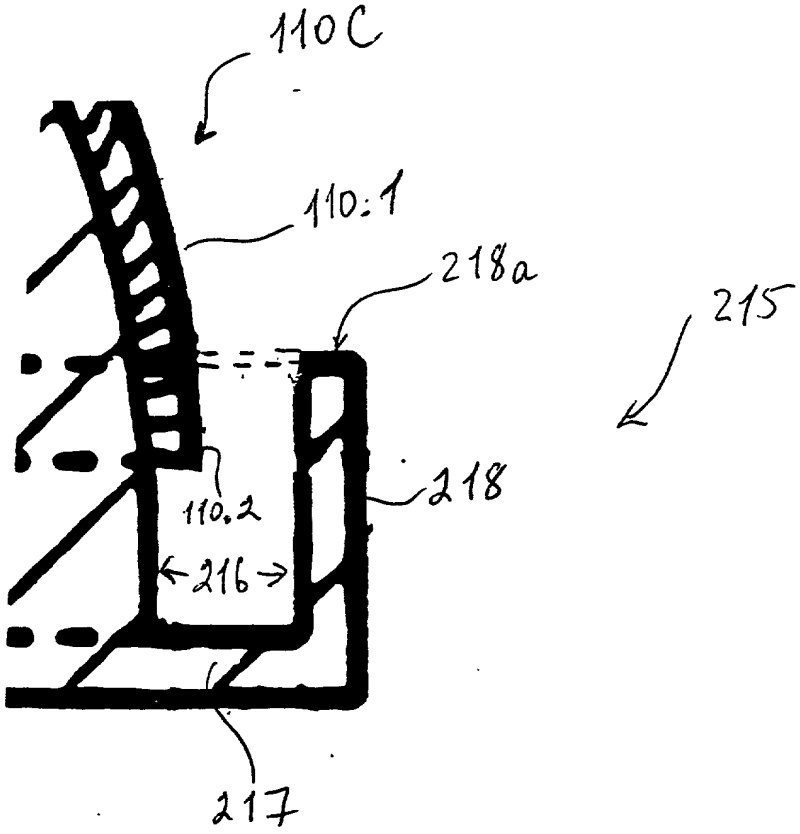


FIG. 15C

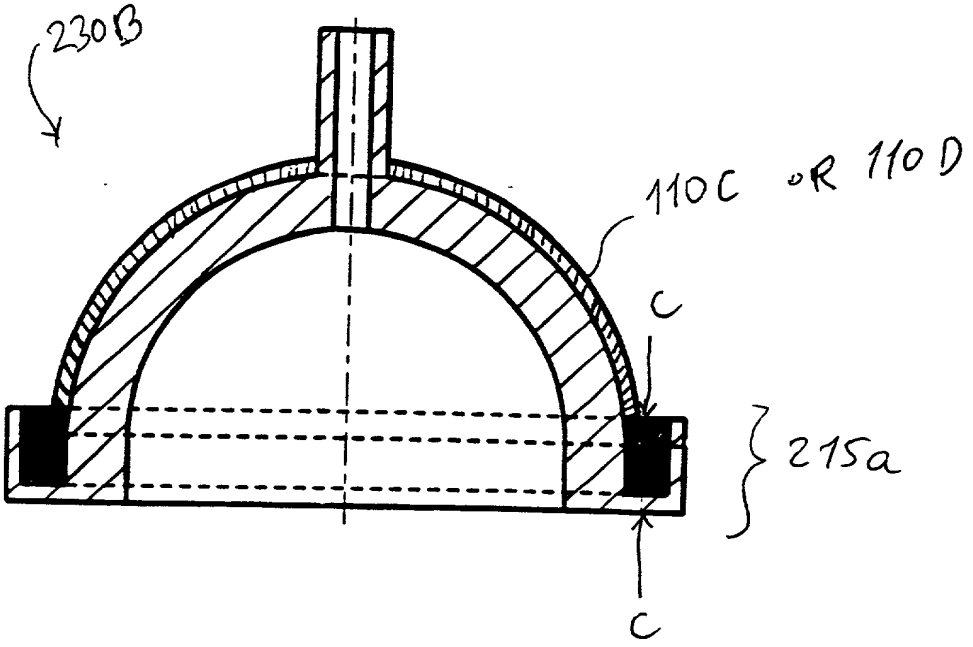


FIG. 16A

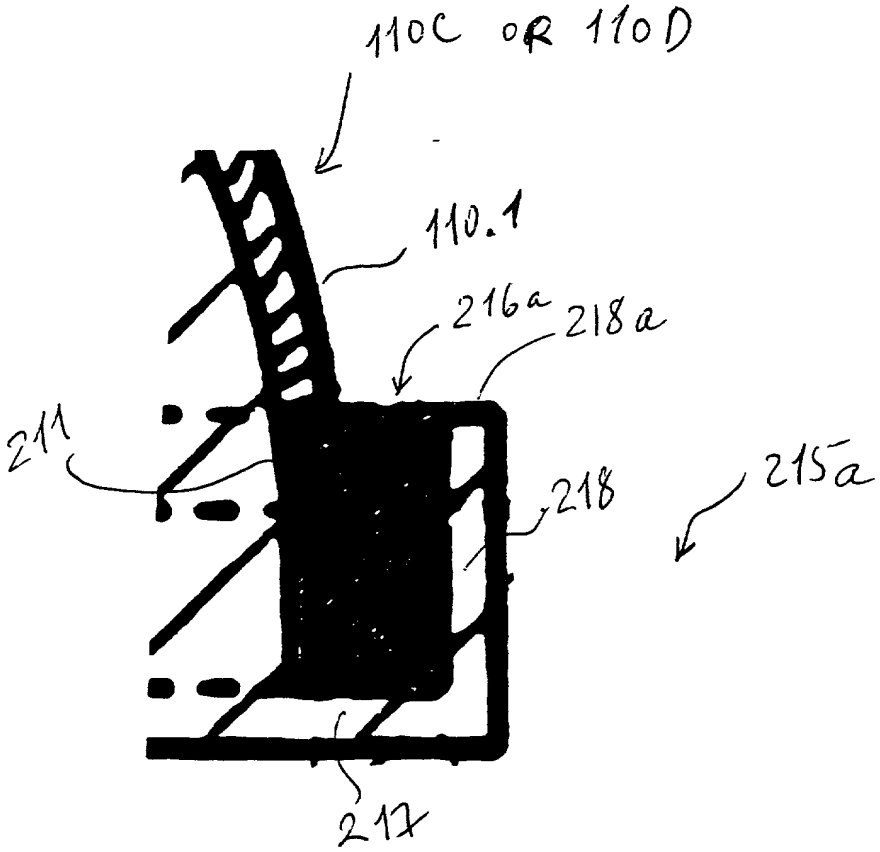


FIG. 16B

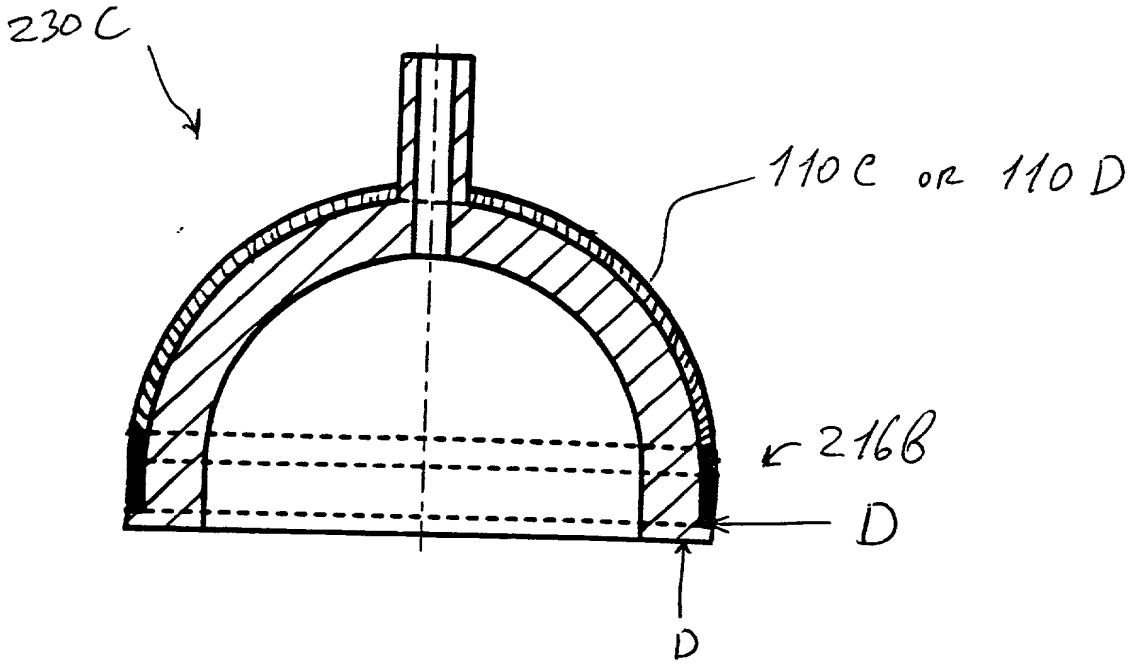


FIG. 17A

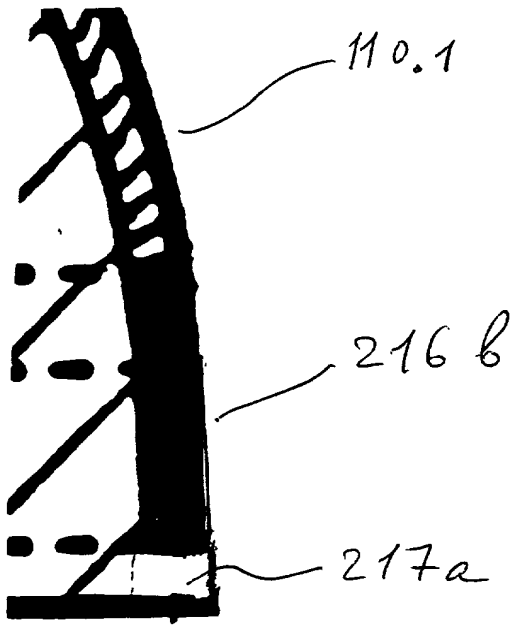


FIG. 17B

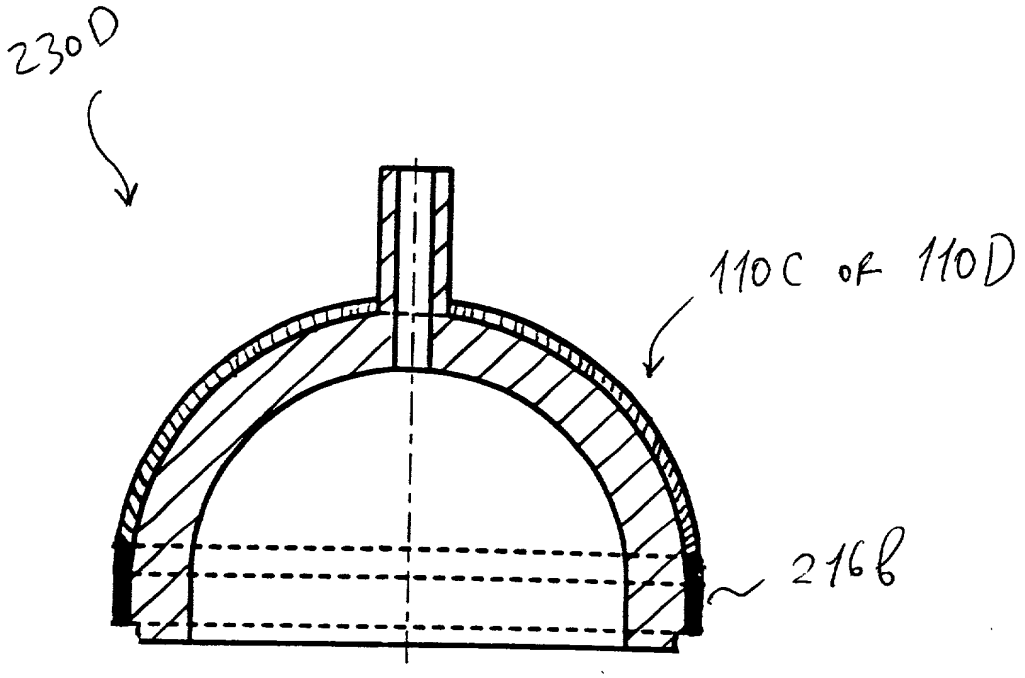


FIG. 18A

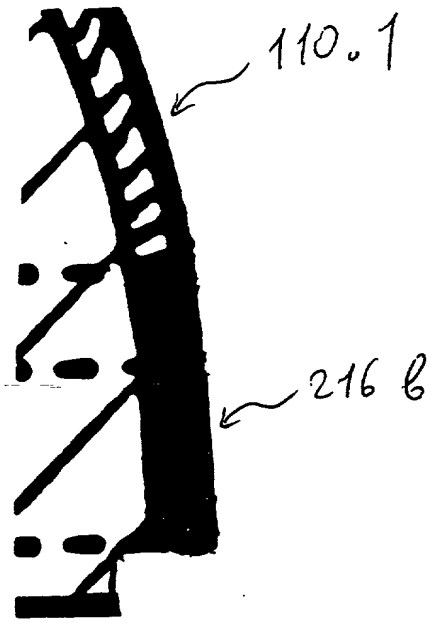


FIG. 18B